Bull Creek - Bull's Brook e-News

March 2017

Upcoming Watershed Council Meeting

Please join us for the next Bull Creek -Bull's Brook Watershed Council meeting on Thursday, March 16, 2017 · 1-3 PM at the Lake Co. Forest Preserves General Offices.

> Mark Your Calendar

2016 Watershed Council meeting Schedule

Thursday, June 15, 2017 · 1-3 PM · Location TBD. Thursday, October 19, 2017 · 1-3 PM · St. Mary's of the Lake.

Buckthorn Be Gone! & Regulatory Permitting Demystified

Please join the Bull Creek-Bull's Brook Watershed Council on Thursday, March 16th from 1PM - 3PM at the Lake County Forest Preserves General Offices. Come listen to Matt Ueletzen describe the LCFP's "Buckthorn Eradication" pilot program and its potential impact on buckthorn eradication for all types of surrounding landowners.

tential impact on buckthorn eradication for all types of surrounding landowners.



Matt's talk will be followed by a presentation by Mea Blauer and Scott Griffith of the Lake County Planning and Development Department and Lake County Stormwater Management Commis-





sion; respectively. They will explain the regulatory and review processes for the Lake County Watershed Development Ordinance, and the permitting process for projects in unincorporated areas.

The Lake County Forest Preserves General Offices are located at 1899 West Winchester Road, Libertyville IL. The meeting is open to anyone who would like to attend.

Citizen Scientists Monitor Bull Creek North

By Steve Cepa, LPAHA homeowner & RiverWatch Citizen Scientist



Monitored Section of Bull Creek by RiverWatch Volunteers

he "Illinois RiverWatch Network is a volunteer stream monitoring program that seeks to engage Illinois citizens by training them as Citizen Scientists. Each year at adopted stream sites in their communities, Citizen Scientists conduct habitat and biological surveys, including the collection and identification of small stream organisms called macroinvertebrates that serve as bioindicators of water quality. The program strives to collect consistent, high-quality data on the conditions of local streams and provide citizens with a handson opportunity to be better stewards of our watersheds."

Each Spring since 2011, <u>RiverWatch</u> volunteers have been monitoring the North Branch of Bull Creek. The portion observed and inventoried is within the LPAHA subdivisions commonly referred to as "Bull Creek" located just north of Libertyville. Each June, Ken Weik and Steve Cepa, along with Glen Moss and Jim Schuler, have been collecting macroinvertebrates and gathering data about the creek. Then in July, the macroinvertebrates are taken to

Bull Creek - Bull's Brook

Citizen Scientists... continued from p. 1.



Mayfly nymph macroinvertebrate



Adult Mayfly Photo by Phil Bendle

the College of Lake County biology lab in Grayslake for identification.

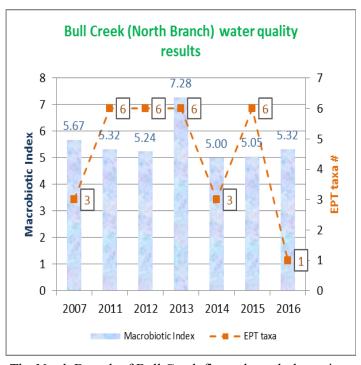
The inventory's key parameters are based on how many organisms were found and of what type species or taxa. Some organisms will thrive pretty much anywhere, such as bloodworm midges and alderflies that mature to become small flies. Others can only thrive in relatively clean water, such as Mayfly or Ephemeroptera, Stonefly or Plecoptera, and Caddisfly or Trichoptera. Collecting, counting, and identifying these macroinvertebrates provides clues about the water quality. The IL Department of Natural Resources uses a tolerance index (TI) to assign a value to each organism based on its adaptability to pollution – the

lower the number, the cleaner the water needs to be for them to thrive. The total number of organisms, their taxa, and their TI can all be combined to calculate an MBI or macrobiotic index. The lower the MBI score the better the water quality. Another metric referred to as EPT taxa richness, refers to the first letter of the Latin names of the Mayfly, Stonefly, and Caddisfly, is based on the most sensitive organisms and is of particular interest. The EPT is just a count of how many of these sensitive species were found, so the greater the number, the better the water quality.

How is Bull Creek doing? It's a mixed bag. There are yearly variations such as in 2013 when the MBI score was Very Poor, while the 2014 score was Good. All other years have scored Fair. What might account for the differences? It was a very dry year in 2013; as the June collection date approached, the Creek was just pencil thin. On the other hand, 2014 was a very wet Spring with the Creek over-flowing its banks on three occasions.

The EPT Taxa Richness has also varied – with several years at an Excellent rating, but 2016 had a Very Poor rating due to finding only a single crawling Mayfly. Based on this poor result the Illinois RiverWatch, using the Illinois EPA crite-

ria, has rated this part of Bull Creek with a "D" grade. The cause of this poor result for 2016 is unknown; this coming June's collection will help decide if this is the new normal or a fluke. Plotting the data since 2011 shows a trend with year 2016 seemingly outside the trend.



The North Branch of Bull Creek flows through the entire LPAHA/Bull Creek subdivision. Upstream of this section are the Libertyville Township Soccer Complex to the south and the Libertyville Sports Complex to the west. Beyond the Sports Complex are some industrial areas plus the new County Fairgrounds. Most of this area was open space or farmland prior to the build-up from about 2000 on. With the build-up more impervious surfaces for parking have been created, meaning the water that previously was absorbed upstream of the LPAHA subdivisions, now flows downstream. The parking lots are typically salted in the winter months and that low-quality water runs off into the Creek. The Creek leaves the LPAHA/Bull Creek subdivisions to the east running just north of the Timber Creek subdivision. The Creek is easily seen going under the new boardwalk as part of the Libertyville Township Bull Creek Spur trail. The water continues east past the Brookhill subdivision, located off Rt. 21, and finally joins the Des Plaines River near the bridge at Independence Grove along the Des Plaines River Trail. It would be interesting to have an additional test point along this flow to see if the wetlands help improve the water quality before it reaches the Des Plaines River.

Proposed Butterfield Road Development

By Chris Geiselhart, Lake County Audubon

Residents of Libertyville are concerned about a development proposed by the Roanoke Group of California. The proposal is to build 148 homes on 15 acres of a 40-acre plot located on Butterfield Road south of the Pine Meadows Golf Course and across the street from Butterfield School. As you drive along Butterfield Road, it's the property where you see huge piles of steaming wood chips left from cutting down some 2,500 mature trees on St. Mary of the Lake Seminary property.

A big concern about the proposed development is the runoff of chemicals, including herbicides and road salt, from the yards and streets into Bull Creek, St. Mary's, and Butler Lakes. These bodies of water are an important part of the Bull Creek/Bull's Brook sub-watershed that is part of the Des Plaines River watershed. Other concerns are density of construction which would necessitate new school classrooms, safety of street entrance and exit for residents of the development, access for fire and police service, and snow removal services during time of intense winter events among other things.

The second Plan Commission meeting for additional information and public input was scheduled for Monday, February 27th, 7:00 at the Libertyville High School Auditorium. The next step will be a Village Board meeting either on Tuesday, March 14th or Tuesday, March 28th. For the latest information, check with John Spoden or David Smith at the Village of Libertyville Planning Division, 200 E. Cook Avenue, Libertyville, IL 60048. (847) 918-2028.

Casey Road Farmland Retirement & Restoration Project

By Kathleen O'Connor, Libertyville Township Supervisor

Restoration efforts have begun on Libertyville Township's Casey Road Farmland Retirement and Restoration Project. Last spring, soil and water samples were taken from 3 locations to establish the baseline values. The Township will be collecting data to measure any improvements in soil and water quality following the restoration efforts. On behalf of the Township, Con-



Casey Rd. Farmland

serve Lake County has created and implemented a monitoring program for butterflies, frogs and birds. Volunteers have begun collecting data. It is anticipated that an increase in the presence of each species on site will be one of the many positive outcomes of the project.

From November 8-10, 2016, the Township staff disabled 915 feet of drain tile. In addition, they've cleared two hedgerows and multiple brush islands of invasives. Volunteers have participated in the efforts by planting 15 bur oak trees. All of this work has been in preparation for the sowing of 2,606.72 pounds of native seed this spring and fall. With the assistance from Conserve

Lake County, the Township has submitted the necessary paperwork to the Illinois Nature Preserve Commission requesting approval for additional acres to be added as buffer to the Liberty Prairie Nature Preserve.



Drain Tile Removal on Casey Rd. Farmland

Safe Drug Disposal

By Chris Geiselhart, Lake County Audubon

one are the days when it was advised to flush away unusable prescription drugs as well as expired over-the-counter supplements and pain medications. It was discovered that these chemicals found their way into our water systems and back into our water supply. Some of them have been found in the fatty tissue of fish that were caught for food. If disposal were to be done through a household septic system, it could eventually contaminate ground water. It became necessary to find other means of disposal.

The Solid Waste Agency of Lake County has created a list with a map showing the many police stations where people can turn in unwanted medications. To learn more,

Safe Drug ... continued from p. 3.

visit the link below for those drop-off points as well as a few Walgreens Drugstores that collect them. Three Lake County Walgreens collection sites are listed on the Walgreen website: 1811 Belvidere Rd., Waukegan; 780 Waukegan Rd., Deerfield; 15 N. Buffalo Grove Rd, Buffalo Grove.



Safe Drug Disposal photo by the FDA

In addition, these products may be mation including dates

http://

www.swalco.org/164/ Household-Chemical-Waste-HCW

dropped off at Household Chemical Waste collection events conducted by SWALCO.

Click the following link for more inforof drop-off events.

Five Steps to Achieve Watershed Friendly Landscaping

By Patty Werner, Planning Supervisor for Lake County Stormwater Commission

Complete the Food Loop

By Chris Geiselhart, Lake County Audubon

good way to make better use of food scraps is to compost them. Composting is a natural process of decomposition of organic waste materials that will result in a rich earth-like material that can be used to fertilize yards and gardens. There are several choices in Lake County: composting in the yard at home; a Ride-Along program, in which you add raw vegetable and food scraps to your yard waste composting bag that's being picked up at the curbside; year round drop off at the Grayslake Recycling Center, 585 Berry Avenue, Grayslake, IL. Hours are Monday - Friday 7:00 am to 3:30 pm; Saturday 8:00 am to 12:00 pm, excluding holidays.

The list of acceptable scraps for composting has been expanded over the years and includes not only raw fruit and vegetable scraps but bread products, crackers, cereal, eggshells, etc. Do not include use liquids, fat, grease, pet waste, glass, metal or plastic. For a very helpful series of

videos with instructional details for composting along with an expanded list, click the SWALCO link.



Photo by EPA

Compost

Maximize Natives - Minimize Lawn Turf

ative plants form the core of an environmentallyfriendly commercial or residential landscape. Native plants tolerate variances in temperature and water making them easier and less resource intensive to care for over the long term. Native plants have much deeper roots than turf grass, with some roots extending to depths in feet rather than inches. Native plants are far better at infiltrating rainfall and stabilizing as well as enriching the soil. Natives are also the preferable habitat for butterflies, birds, and other wildlife in our area.

Start your quest for a better living environment by adding some native plants or expanding your use of more natives in your yard and business landscaping. If you are starting from scratch, start with a design that works for you from a budget and maintenance perspective. Keep it time and money affordable by dividing the design into multiple planting beds and putting in one bed from your design each year until you reach your completion goal. If you have a mature land-

Continued on page 5

Bull Creek - Bull's Brook

5 Ways... continued from p. 4



scaped yard that you really like – just continue to add native plants to the landscape design over time. Click the link more information about natural landscaping.

Remove the Invaders

Unleash any stress you may be feeling by attacking and obliterating the garlic mustard, European buckthorn, bush honeysuckle and other invasive plants that may be creeping into your landscaping. Non-native/invasive plant species can invade your space crowding out the more beneficial native plants. If you have inadvertently installed an invasive plant in the past, or if they have been stealthily moving in from a neighboring property, begin by removing those that are spreading most quickly. You may want to plan your removal schedule with your planting schedule so that you can replace the invasive species with more beneficial natives as you go. Check out this guide for replacing invasive plants with natives or better choice cultivars or non-native species.

Don't Waste the Rain

Save every drop of water that falls on your property by directing it to your landscaping. Most properties can absorb and infiltrate all of the runoff from downspouts, patios, and driveways by directing it into rain gardens or rain barrels. Every drop saved can be used to water your landscape rather than watering the street where it flows into stormsewers and the nearest lake, stream, wetland or river – or a neighbor's basement. More information is available here on how to design and install rain gardens.

Compost and Clippings Are Good for Your Yard - It's Time for a Chemical-Reduced (or free) Diet

First step to chemical avoidance: sharpen your mower blade and raise your mower height to 3 inches to grow healthier grass with longer roots. Create a lawn that can deliver its own nutrients and pest control so that you don't have to spend a lot of money for short-term results with chemicals that may jeopardize the health of your family or pets. Use the compost you have made from plant trimmings and leaves to replenish your lawn instead. The key is healthy soil. For a rich soil, leave your grass clippings on your lawn to return nutrients to the soil. Clippings can provide up to 25% of your lawns' total fertilizer requirements, and they do not contribute to thatch as they are mostly water and decompose rapidly. More information on composting and mulching is available from UMN extension.

Avoid Coal Tar-Based Asphalt Sealants

Coal tar is a by-product of coal processing which is found in some driveway sealants. Pavement sealcoat—also called sealant or driveway sealer—is a black liquid sprayed onto the asphalt pavement of many residential driveways, parking lots, and even some playgrounds. It is marketed as protecting and beautifying the underlying pavement and is used commercially and by property owners across the country. Sealcoat comes in two basic varieties: coal-tar-based and asphalt-based. Coal tar has a high level of toxic chemicals called polycyclic aromatic hydrocarbons (PAHs). The coal tar sealant begins to wear off within a short period of time. Pavement particles and dust with coal tar gets washed into nearby ponds, streams and rivers with stormwater runoff. It is tracked on other surfaces by tires, and can be tracked into your home on shoes. A better choice to protect your family and the environment is a petroleum-asphalt based sealcoat, which is about 1,000 times lower in PAHs. For more information about coal tarbased sealants and alternatives: https://tinyurl.com/ zn8d997 and https://tinyurl.com/z64sxjc.

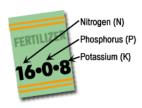
The <u>Conservation Foundation</u>, <u>Conserve Lake County</u>, and <u>Lake County Stormwater Management Commission</u> have more information on places to acquire native plants and best "yard-keeping practices."



Healthy Lawn Care

ecently, more attention has been focused on the environment and protecting our water sources from possible contamination. A healthy manicured lawn can intercept thousands of gallons of water from a heavy rain, recharging groundwater supplies while minimizing erosion. In addition, a healthy turf can utilize and then break down fertilizers and pesticides into their basic components. Using good management practices for maintaining lawns, such as soil testing, planting the correct grass variety, understanding the need for thatching and aeration, appreciating the benefits of proper mowing frequency and blade height, judicious use of pesticides and well-timed application of fertilizers can all contribute to the goal of protecting our water supplies.

Feed the Soil



Soil is a living thing! It breathes, drinks, eats, digests, and excretes waste just like we do. When the soil is healthy the vegetation in a yard will grow. It also enables

grass to be more drought tolerant, disease-resistant, and maintenance free. Soil can be fertilized by using one of two methods; one uses <u>organic</u> materials and the other <u>chemical</u> compounds. Fertilizers composed of organic materials act as soil food that nourishes the soil's organisms, whereas the chemical compounds found in commercial fertilizers directly feed the vegetation. The main disadvantage of the chemical fertilizers is that much of it runs off into creeks, rivers, lakes, or oceans or is transported to ground water causing degradation through eutrophication and hypoxia that are attributable to nitrogen and/or phosphorus enrichment.

It is important to take the guesswork out fertilization to avoid excessive fertilizer run off. Soil testing will determine the amount of nitrogen, phosphorus, potassium, lime, sulfur, and other nutrients present in the soil. High levels of phosphorus and nitrogen can harm natural water sources and drinking water. When present in excess, other nutrients can also weaken or kill vegetation growing in the soil. Most Cooperative Extensions offer diagnostic soil testing. In Lake County, Illinois soil testing is available through the University of Illinois Extension Soil Testing

<u>Labs</u>. Do it yourself soil testing kits are also available at some area hardware stores, <u>Amazon</u>, or the <u>Gardener's Supply Company</u>. Soil testing also provides information on the pH of the soil. The correct pH of 6.5 is needed for the soil to absorb nutrients. Alkaline soils are those having a pH above 7.0 and acidic soils have a pH below 7.0. Dolomitic limestone may be added to increase the pH of a soil that is too acidic, but it should only be used on soils that are below pH 7.0 since it can encourage weed growth.

Grow the right grass

Not all grass is created equal! Some grasses have preferences for sun, shade, or both. Other grass species will tolerate foot traffic or drought. Some varieties of grasses grow tall while others are short. Many grass cultivars grow more slowly making them disease resistant, reducing the need for pesticides, watering, and mowing. Visit <u>Seedland</u> for suggestions on grasses best suited for your area and needs. Are you looking for a drought friendly, eco-friendly lawn? <u>Prairie Nursery</u> offers a grass seed mix that can be mowed as little as desired depending on the lawn aesthetics preferred.

Thatching and Aeration

Lawns require thatching and aeration to remain healthy. Lawn thatch is dead grass and root tissue found between the vegetation and soil surface. A healthy population of soil fauna, including microorganisms and earthworms, helps to break down the thatch layer. This highly absorptive thatch layer minimizes runoff while tying up and encouraging the degradation of certain pesticides, thereby reducing leaching. When layers of thatch become ½ inch or thicker, water, air, and nutrients cannot reach the plant's roots and provides a nesting place for insects and an environment for disease. It is important to note that traditional, synthetic lawn care results in a quick buildup of thatch. Dethatching can be accomplished with a rake or power machine and the resultant organic material can be gathered and composted. Once the lawn has been dethatched, it should be aerated with a hand or mechanical aerator to provide adequate air pockets for nutrients, water, and air soil infiltration. If the task sounds daunting, consider this a onetime task if the lawn is tended organically since with natural fertilizers that allow the soil to self-aerate!

Mow wisely

A greener lawn can be accomplished by using sharp mower blades for cutting. Reduce the number of times the grass is cut. Cut only 1/3 off the length of your grass at any giv-

Bull Creek - Bull's Brook

en time. Refrain from mowing unless there is rain in the short term forecast to reduce browning and stress to the vegetation.

Herbicides & Insecticides

First, it is important to understand why the weeds and pests have taken up residence in the grass. It's all in the soil chemistry. Adjusting the soil chemistry with nutrients will help eliminate these problems. It is important to note that "Weed & Feed" products should be avoided since they include both fertilizers and pesticides and more importantly, their application rates are usually based on the pest control product and not the fertilizer. Over application of nitrogen commonly occurs as a result of combined fertilizer and pesticide products, which can increase the incidence of summer turf diseases. Additionally, application of combination products results in pesticides being applied where they are not needed. It is better to use spot applications of specific pesticides for pest problems in lawns. An alternative, natural "Weed & Feed" is corn gluten. It is a readily available product that has the ability to prevent successful seed germination if applied as a Spring pre-emergent but has no known pesticide activity.

Lawn Care Questions to Answer

Armed with lawn care facts any DIY can nourish their grass. If you aren't into DIY projects, one can consider employing a lawn care provider. Below you will find some relevant questions to ask any organic or chemical based lawn care professional:

- Will soil testing be performed to evaluate the condition of my lawn's soil?
- Will the soil be dethatched & aerated?
- What type of fertilizer will be used on the lawn, organic or chemical?
- How many applications of fertilizer will be used on my grass?
- Will the minimum amount of fertilizer be applied to my lawn?
- How will weeds be controlled?
- How often will my lawn be cut throughout the growing season?
- Will the grass clippings be mulched or <u>composted</u>?

Many of us have antiquated ideas about lawn care, relying on a time when water appeared inexhaustible and chemical fertilizers, insecticides, herbicides, and fungicides seemed safe. It's time to consider <u>sustainable</u>, <u>environmentally</u> friendly practices that enhance turf growth and

reduce pests and <u>diseases</u>. Sustainable or <u>organic lawn</u> <u>care</u> also reduces runoff and leaching of excess nutrients and pesticides into surface and ground waters resulting in greater biodiversity and conservation of birds and insect species. Reducing turf stress also benefits the environment since maintenance practices employ soil testing, proper grass variety selection, adequate watering, correct mowing height and frequency, and understanding the need for thatching and aeration. Be bold, start a turf revolution to end the use of the over 67 million pounds of toxic fertilizers and pesticides applied to grass in pursuit of a perfect lawn and garden.

An Itchy Green Thumb

By Sally Pilcher & Fritz Chesek, Loch Lomond HOA



Property Before Native Landscaping

bout twelve years ago, we moved into a little house on Loch Lomond lake in Mundelein. The yard was entirely grass and trees with a few bushes and orange daylilies scattered around the property. The primary plant was buckthorn. That March, Sally's "Green Thumb" began to itch. As soon as we could, we were outside to plan, weed, prune, and plant. First, we removed all the buckthorn that had formed a tight screen around the back yard. We added additional ground cover and plants to complement what had already been planted. Little did we know that the groundcover and some other plants sold to us by our neighborhood big box garden stores were also invasive and non-native to the area.

Over the years, as we became more involved in this community life and began to appreciate the benefits of native grasses and plants, my wife turned more and more toward natural landscapes and native plantings. The buckthorn, honeysuckle bushes, and most of the lawn were removed to accommodate her new vision. We enlisted the assistance of the Conservation@Home program to identify in-

An Itchy... continued from p. 7

vasive plants that we could replace with natives. A help-ful, creative representative came and spent the morning identifying what we had, what might be done, and even how to be certified for the Conservation@Home program. The removal of grass also meant that we needed to slow the flow of runoff water from the street and adjacent property and allow the runoff time to percolate through our plantings before entering the lake. We accomplished this with dense biomass plantings and stone. Our redesigned landscaping includes over 80 varieties of native plants, shrubs, and trees:

Plants in Sally and Fritz's Garden:

Sensitive Fern
Fragrant Sumac
Wild Geranium
Giant Solomon's Seal
Golden Alexander
Zigzag Goldenrod
Round Lobed Hepatica
Jack-In-The-Pulpit
Jacob's Ladder
Jewelweed
Sullivant's Milkweed
Swamp Milkweed
Whorled Milkweed
Pale Purple Coneflower
Purple Coneflower
Red Columbine
Red Trillium
Senna
Sharp Lobed Hepatica
Sneezeweed
Solomon's Seal
Trout Lily
Turtlehead
Variegated Solomon's Seal
Serviceberry
Arrowwood Viburnum

Our ongoing goal is to find a nature friendly balance among natives and cultivars that provide an aesthetically



pleasing and responsible eco-friendly landscape. In 2015, we were recognized as a Nationally Certified Wildlife Habitat, a National Monarch Waystation, and were certified by the Lake County Conservation @ Home program. In 2016, our garden was selected by the Gardeners of Lake County to be visited on their annual Garden Walk.





Sally & Fritz's Property After Conservation @Home Consultation

Liberty Prairie Foundation

The Bull Creek-Bull's Brook Watershed Council would like to extend our thanks to the Liberty Prairie Foundation (LPF) for financially supporting stakeholder coordination and outreach in the Watershed. The Foundation generously awarded the Watershed Council a grant to support coordinating watershed meetings and events, and in recent years that support has been used to help produce the Watershed E-News. The Liberty Prairie Foundation's mission is to promote the integration of healthy ecosystems and the vibrant human communities they support. Thank you LPF for your commitment to clean and healthy waters in our watershed communities!

BULL CREEK-BULL'S BROOK WATERSHED COUNCIL



Kathleen O'Connor

Council Chairperson koconnor@libertyvilletownship.us

Council Leadership Team

Chris & Paul Geiselhart

ccgeisel@aol.com + geiselhart8@aol.com

Ken Klick

kklick@lcfpd.org

Clayton Kalweit

ckalweit@usml.edu

Patty Werner

pwerner@lakecountyil.gov

Jonathan Happ

jhapp@libertyvilletownship.us

Fritz Chesek

FChesek@comcast.net

Upcoming Events...

Des Plaines River Watershed Planning Meeting; Thursday, Mar. 9 & Apr. 13 • 1-3 p.m. & 6-8 p.m., respectively. In March, the topic will be the "Des Plaines River Watershed History and Setting" and in April the focus will be on "Developing an Education and Outreach Strategy for the Des Plaines Watershed.", Central Permit Facility, 500 W. Winchester Rd. Libertyville, IL.

WildOnes Meeting; Tuesday, Mar. 7, Apr. 11, & May 2 • 7-8:45 p.m., Topics are as follows: *A Wealth of Possibilities for Shade Gardens, Using Natives to Create a Traditional Looking Suburban Garden, Water Doesn't Lie: A Native Plant Solution to Drainage Problems.*, Fremont Public Library, 1170 N Midlothian Rd., Mundelein IL.

Green Living Fair; Saturday, Mar. 15 • 10-2 p.m., Libertyville Civic Center, 135 W. Church St., Libertyville, IL.

Principles and Practice of Ecological Restoration; Tuesdays & Thursdays, Mar. 21 - May 11 • 3-5:20 p.m., Oakton Community College Des Plaines Campus. This immersive and hands-on course will educate students on the history and importance of ecological restoration practices and allow them to put classroom knowledge to the test with hands-on restoration projects on campus. This is excellent training for individuals who may be interested in careers related to ecology, restoration, natural resources, forestry, environmental science, or related work areas. However, it is also a great experience for anyone who cares about the natural world and wants to spend time learning about and protecting our local wild spaces.

Ongoing Events...

Liberty Prairie Workdays; Saturday, Mar. 11 & May 13 • 9 a.m. to noon, 18267 Casey Road, Grayslake, IL • parking is located on the south side of Casey Road, one mile west of Milwaukee Avenue (Rt 21). Turn into the private driveway and park/meet where the driveway crosses the trail. For more information, contact Conserve Lake County at 847.548.5989 ext. 33.

Libertyville Township - Oak Openings Volunteer Restoration Work Days; Tuesday, Mar. 14 & Saturday, Apr. 8 & Jun. 10 • 9:00 a.m. to noon, Volunteers will meet in the parking lot of Oak Openings Nature Preserve located on Rte. 45, 3/4 mile south of Rt. 120 and 1/2 mile north of Casey Rd., Grayslake, IL.

Libertyville Township - St. Mary's Work Days; Wednesday, Apr. 12, • 9:00 a.m. to noon. Volunteers will meet at Lindholm Park. The park entrance is at the of Park Place in the Countryside Manor subdivision.

To learn more about Libertyville Township volunteer opportunities, call 847.816.6800 or 847.548.5989 ext. 33 or http://www.libertyvilletownship.us/open-space-district/volunteer-opportunities